Amendments to the claims:

The following listing of claims replaces all prior versions of the claims:

1. (Currently Amended) A method of embedding images from other sources within images captured by a viewing device in motion, by transmitting and analyzing the positional coordinates of the viewing device during acquisition of a sequence of video images (I) while the viewing device is moving through space along a trajectory (t) determined with respect to a defined reference point, the method comprising: ~~The invention consists of a process for transmitting the positional coordinates of a viewing device during the acquisition of a sequence of video images while the viewing device is moving through space along a trajectory determined with respect to a defined reference point, characterized according to at least the following steps:~~

- [[A]] a prelimary step consisting of attaching [[the]] said viewing device ~~unit (10, 10')~~ to a first subsystem ~~(11, 11')~~ which contains an inertial sensing unit delivering data signals representing [[the]] spatial coordinates ~~and the~~ instantaneous inclination and the focal lenght of [[the]] said viewing device with respect to [[the]] said defined reference point;

- [[A]] a first step of acquiring ~~involving the acquisition~~, in real time, of [[the]] said data signals during the movement of [[the]] said viewing device ~~(10, 10')~~ along [[the]] said trajectory (*t*) and ~~their transmission~~ the transmision of said data signals to a second subsystem ~~(12, 2)~~ which includes equipment for processing ~~these~~ said data signals [[(4)]] using a stored software program; and

- [[A]] a second step ~~consisting~~ of processing [[the]] said data signals, either in real time or deferred for later analysis, so as to determine [[the]] said coordinates of position, and improving the quality of the acquired data by applying an image analysis procedure.

2. (Currently Amended) ~~Furthermore, the invention includes a process~~ The method, according to claim 1, wherein ~~[[the]] said defined reference point (*XYZ*) is an orthonormal trihedron and [[the]]~~ said coordinates represent the position of [[the]] said viewing device ~~(10,10')~~ along [[the]] said trajectory (*t*) in relation to the axes of [[the]] said orthonormal trihedron of reference (*XYZ*) and the inclination data represents the

angles of azimuth, elevation and roll around the axis of [[the]] said viesing device ~~(10, 10')~~, [[the]] said axis intersecting the center (C) of the focal plane (FP) of [[the]] said images (I).

3. (Currently Amended) ~~Furthermore, the invention includes a process~~ The method, according to ~~either of the preceding claims~~ claims 1, wherein, during a supplementary preliminary step, ~~the said second subsystem (12,2) is configured (51) in a manner conforming to the description of the characteristics of the components comprising the said first (11, 11') and second (12,2) subsystems, including the characteristics of the said viewing device (10, 10') and of the software contained in the data processing unit (4) of the said second subsystem (12,2). In another supplementary preliminary step,~~ [[the]] said inertial sensing unit ~~(52)~~ is initialized and standardized with respect to a reference point of origin.

4. (Withdrawn - Currently Amended) ~~Furthermore, the invention includes a process, according to either of the preceding claims,wherein, during a supplementary preliminary step, the said data signals, representing the positional coordinates and the instantaneous inclination of the said viewing device (10, 10') with respect to the said reference (*XYZ*), are synchronized (56). Another supplementary preliminary step involves~~ The method of claim 1, wherein the ~~application of~~ error corrections [[(53)]] to [[the]] said positional data streams delivered by [[the]] said inertial sensing unit. ~~Another supplementary preliminary step involves further improving the quality of the said acquired data (55)~~ is done by applying an image anaysis procedure, included among the software contained in the data processing unit ~~(4). A final supplementary preliminary step consists of storing the said acquired data (57) within the hard drive data storage module (403) of the said data processing unit (4).~~

5. (Withdrawn - Currently Amended) ~~Furthermore, the invention includes~~ The method of claim 1, wherein the integration of ~~a process, according to either of the preceding claims, for integrating~~ the focal planes (*FP*) of images (*I*) is obtained ~~using the said viewing unit (10, 10') with the focal planes of images from other sources whose spatial coordinates are already known,~~ by acquiring data identifying the focal length used by ~~the~~ said viewing device ~~unit (10, 10')~~ and by capturing, in real time, data signals representing

the spatial coordinates and the instantaneous inclination of ~~the~~ said viewing device ~~unit (10, 10') with respect to the said reference (*XYZ*), in order to determine the corresponding coordinates of the focal planes (*FP*) of the said images (*I*) within the said video sequence, the said coordinates of the focal plane (*FP*) of the image (*I*) being:~~

~~the inclination of the said focal plane (*FP*) in space with respect to the said reference (*XYZ*), represented by the angles of elevation, azimuth and roll; and~~

~~the position of the center I of the said plane (*FP*) of the image (*I*) with respect to the said reference point (*XYZ*).~~

6. (Withdrawn – Currently Amended) ~~Furthermore, the invention includes a process, according to either of the preceding claims,~~ The method according to claim 1, ~~for navigating within a three-dimensional universe (59) involving a preexistant three-dimensional décor. The said process consists of the supplementary steps of acquisition and transmission to the second subsystem (2, 12), in real time, of data representing the spatial coordinates and the instantaneous inclination of the said viewing unit (10, 10') with respect to the reference point (*XYZ*), as well as the focal length used, as well as the images captured by the said viewing unit (10, 10') and the processing of the data signals and the images using software for three dimensional reconstitution~~, the data signals and the focal length are used in a manner so as to visualize, in real time, ~~an outline of the framing of the said viewing unit within the said preexisting three-dimensional virtual décor~~ the images captured by said viewing device into a preexisting three-dimensional virtual décor by using software for three dimensional reconstitution .

7. (Withdrawn – Currently Amended) ~~Furthermore, the invention includes a system~~ A method of claim 1, wherein ~~for the transmission and processing of data representing the position in space of a viewing unit capturing a sequence of video images while moving in space along a trajectory determined with respect to a reference in order to implement the processes, according to claims 1 to 4, involving a first subsystem (11, 11') attached to a viewing unit (10, 10'). The said first subsystem (11, 11') comprises an inertial sensing unit delivering the said data signals representing the spatial coordinates and instantaneous inclination of the said viewing unit with respect to the said reference point (*XYZ*). In addition, the said system (1, 1') includes a second subsystem (2, 12) provided with the means to process these data according to a stored software program (4) and possessing a means for~~

~~syssupplying electrical energy (400-401) to all or part of the system (1, 1'). Finally, it is envisaged that the system~~ ~~will~~ it is include connecting devices ~~(112, 112')~~ for transmitting the ~~said~~ signals from the first ~~(11, 11')~~ to the second subsystem ~~(2, 12).~~

8. (Withdrawn - Currently Amended) ~~With respect to claim 7~~ The method of claim 1, wherein the viewing device ~~(10, 10')~~ is a video camera.

9. (Withdrawn - Currently Amended) ~~With respect to claims 7 or 8, the said~~ The method of claims 1, wherein ~~the said~~ the inertial sensing unit includes at least one gyrometer and one accelerometer with three distinct, non-coplanar axes.

10. (Withdrawn - Currently Amended) ~~With respect to any of claims 7 to 9~~, The method of claims 9, wherein in order to improve the determination of spatial coordinates of the ~~said~~ viewing device ~~(10, 10'),~~ and to improve the synchronization between the ~~said~~ acquired data and the images (*I*) obtained~~, and/or to apply corrections to the said acquired data, the system will include~~ comprises at least one of the following components~~, housed within theviewing unit (10, 10'), the first subsystem (11,11') or the second subsystem (2,12)~~ ;

- A tri-flux rotary magnetometer;
- Two inclinometers, orthogonal with respect to each other;
- A satellite localization device of the "GPS" type;
- An electronic localization device, using either electromagnetic or electrostatic fields;
- A magnetometer of one or several fluxes, either static or dynamic;
- An odometer;
- A temperature sensor;
- A precision quartz timer;
- An auxiliary video camera, attached to said first subsystem, ~~and/or~~ and
- A microphone ~~(23).~~

11. (New) The method of claim 4, further comprising improving the quality of the said acquired data by applying an image analysis procedure, included among the software which is included in the data processing unit.

12. (New) The method of claim 1, further comprising a supplementary preliminary step consists of storing the said acquired data within the hard drive data storage module of the said data processing unit.